

ABSTRACT OF DISCLOSURE

The present invention refers to dental self-curing resin compositions having enhanced mechanical and physical properties. In particular, the present invention relates to dental self-curing resin compositions consisting of (i) a Paste A composition containing the multifunctional prepolymer mixture of 2,2-bis-[4-(2-hydroxy-3-methacryloxypropoxy)phenyl]propane ("Bis-GMA") and multifunctional prepolymer formed by substituting hydrogen atoms in hydroxyl group with methacrylate groups in the Bis-GMA molecules, and further containing a diluent, an adhesive monomer, a polymerization initiator, a polymerization inhibitor, a light stabilizer, an antioxidant, an inorganic pigment and an inorganic filler; and ii) a Paste B composition containing the same prepolymer mixture in the Paste A composition, and further containing a diluent, an adhesive monomer, a reductant, a polymerization inhibitor, a light stabilizer, an antioxidant, an inorganic pigment and an inorganic filler. The composition according to the present invention has better physical and mechanical properties than that of conventional compositions and is an ointment-ointment system able to be conveniently used.